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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/827,255

**Applicant(s)**

HIKICHI ET AL.

**Examiner**

MARCUS T. RILEY

**Art Unit**

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CIS)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 10/29/2004

## DETAILED ACTION

### Response to Amendment

1. This office action is responsive to applicant's remarks received on May 22, 2008. **Claims 1-9** remain pending.

### Response to Arguments

2. Applicant's arguments with respect to amended **claims 1 & 7-9**, filed on May 22, 2008 have been fully considered but they are not persuasive.

### Applicant's Arguments

*The applied references, alone or in any permissible combination, are not seen to disclose or to suggest the features of Claims 1, 7 and 9, and in particular, are not seen to disclose or to suggest at least the features of writing image information with a plurality of level information for visualizing to a storage device attached to a recording medium, and to vary a content to be printed based on the level information written on the storage device.*

*However, the cited portions of Palmer simply disclose that a central supermarket computer is programmed to retrieve product information associated with an article ID code and to output the same to a display or to a printer for generation of a checkout invoice. (See Palmer, Column 6, lines 40 to 46). Thus, Palmer is not seen to disclose setting an attribute of image information, the attribute indicating whether or not the image information is to be visualized.*

**Examiner's Response**

The applied references, alone or in any permissible combination, does disclose or suggest the features of Claims 1, 7 and 9. Petteruti '401 discloses or suggests at least the features of writing image information with a plurality of level information for visualizing to a storage device attached to a recording medium, and to vary a content to be printed based on the level information written on the storage device.

Petteruti '401 discloses a plurality of level information for visualizing ("*The controller 34 enables the printer 10 to communicate with a host terminal or host computer via RF or infrared signals, or by cable coupled to an RS-232 port 25 on the printer, as described in the incorporated patents. LED indicators and keypad 28 are provided on the housing 12 to enable the user to interface with the printer 10.*" column 3, lines 53-58); See also ("*The controller 34 responds to such commands which direct RFID circuit encoding in accordance with FIG. 3, and the data associated with the commands may include RF tag information, such as product name, description, weight, or id number. In response to receiving such commands and data, the printer first determines whether the commands and data are valid (step 54). Validity may include whether the printer 10 is associated with an address or printer-type specified in the command, and whether the command is one of a set of valid commands. If the command and data is not valid, the printer ignores the command and data (step 55) and the controller 34 branches back to step 52. If the commands and data are valid, the controller 34 directs the encoder 22 to query (read) the RFID tag address (or tag identifier) of the RFID circuit on the media adjacent the encoder's antenna (step 56). The controller 34 then checks if the RFID address read is valid (step 57). If the RFID circuit returns no response or an invalid response, the controller 34 sends*

*a message to the host that an error has occurred (step 58), otherwise, the controller 34 encodes (stores or records) the RFID with the received data (step 60). The controller is programmed to determine which RFID address is valid for the type (or manufacture) of RFID circuit being used. The controller 34 optionally may also send to the host the address (or tag identifier) of the RFID circuit.” column 4, lines 46-67 thru column 5, lines 1-3).* Here the user interfaces with the controller 34. The controller responds to the user commands and determines whether they are valid or not and a message is communicated to the host.

Petteruti ‘401 also discloses where the content to be printed is varied based on the level information written on the storage device by said writing unit (See Petteruti ‘401 at column 4, lines 33-67 thru column 5, lines 1-26. Here, Petteruti ‘401 explains where the RFID tag information is encoded for the printer. Petteruti ‘401 further explains where the information in the storage is varied by the name, description, weight or ID number).

The cited portions of Palmer discloses setting an attribute of image information, the attribute indicating whether or not the image information is to be visualized.

Palmer ‘702 discloses a setting step of setting an attribute of the image information generated in said generating step, the attribute indicating whether or not the image information is to be visualized (*“Preferably, a central supermarket computer attached to the network controller is programmed to retrieve product information such as name, brand, size, weight, etc. associated with the article ID code and to output the same to a display located outside the shielded enclosure. The same product information can also be output to a printer outside the enclosure for generation of a checkout invoice.”* column 6, lines 40-46); (*“Referring to FIG. 1, the data terminal of the present invention as embodied in RFID tags 10 is shown in use as part of a*

*supermarket checkout system. As shown cart 22 holding randomly disposed articles 24 to which RFID tags 10 (each having a data terminal) have been conformably attached is moved into an RF shielded enclosure 16 via a conveyor 18 mounted below the enclosure. An external network controller 12 of the type generally called a Point of Sale Terminal (POST), described below, is located inside the enclosure. A display and printer 14 displays the item and/or price and prints a record for the customer..." column 7, lines 29-40).*

The other claims in the application are each dependent from the independent claims discussed above and are not allowable over the applied references. Thus, Applicant's arguments with respect to amended **claims 1 & 7-9**, filed on May 22, 2008 have been fully considered but they are not persuasive.

**Claim Rejections - 35 USC § 101**

*(The previous claim objections are withdrawn in light of the applicant's amendments.)*

**Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. **Claims 1, 2, 7 & 9** are rejected under 35 U.S.C. 102(e) as being anticipated by Petteruti et al. (US 6,409,401 hereinafter, Petteruti '401).

**Regarding claim 1;** Petteruti '401 discloses an image processing apparatus comprising: an input unit which inputs image information including a first image information having a first attribute for printing (*"...the portable printer of the present invention has a printer mechanism for printing on media and a RFID encoder for encoding information onto RFID circuits attached, or bonded, to the media to provide integrated RFID media."* column 2, lines 4-8); and a second image information having a second attribute for storing (*"The media is stored in a compartment in the housing on a roll or fan-fold in which multiple RFID circuits are provided along the length of the media."* column 2, lines 16-19); a printer which prints an image based on the image information input by said input unit on a recording medium to which a storage device is attached (*"It is another aspect of the present invention to provide a portable printer for printing on media and encoding RFID circuits coupled to such media in which the information printed on the media can be related to the information encoded."* column 1, lines 66-67 thru column 2, lines 1-3); a writing unit which writes the image information to the storage device attached to the recording medium (*"Portable label printer 10 further includes an RFID*

*(read/write) encoder 22 having a RFID antenna 23 capable of encoding by RF signals on the RFID circuit positioned near the antenna. RF shielding 26 is provided in housing 12 to avoid the possibility of encoding other RFID circuits of media 16, but for the RFID circuit of the media 16 at a position near print head 18 adjacent antenna 23. The RFID encoder 22 operates in accordance with programmed microprocessor controller 34 (FIG. 2) on the printed circuit board 24 to write data onto the RFID circuit, such as information as: in a retail environment, product price, type, or other identifier; in a warehouse environment, product information, quantity, or location; and in a baggage ticket, flight information, owner, or baggage identifier.”* column 4, lines 21-34); a controller which controls said printer and said writing unit to print the image based on the first image information having the first attribute input by said input unit is on the recording medium and to write the second image information having the second attribute input by said input unit with a plurality of level information for visualizing to the storage device attached to the recording medium on which the image is printed by said printer (“*The host terminal or computer sends to the printer 10, via one of RF radio, infrared, of serial cable, commands and data, such commands can direct the printer controller 34 to print on media using the print mechanism 36, or direct the printer controller 34 to encode or read an RFID circuit 16a on media 16 (step 52). The controller 34 responds to such commands which direct RFID circuit encoding in accordance with FIG. 3, and the data associated with the commands may include RF tag information, such as product name, description, weight, or id number.*” column 4, lines 40-50); See also (“*In response to receiving such commands and data, the printer first determines whether the commands and data are valid (step 54). Validity may include whether the printer 10 is associated with an address or printer-type specified in the command, and whether*



*the command is one of a set of valid commands. If the command and data is not valid, the printer ignores the command and data (step 55) and the controller 34 branches back to step 52. If the commands and data are valid, the controller 34 directs the encoder 22 to query (read) the RFID tag address (or tag identifier) of the RFID circuit on the media adjacent the encoder's antenna (step 56). The controller 34 then checks if the RFID address read is valid (step 57). If the RFID circuit returns no response or an invalid response, the controller 34 sends a message to the host that an error has occurred (step 58), otherwise, the controller 34 encodes (stores or records) the RFID with the received data (step 60). The controller is programmed to determine which RFID address is valid for the type (or manufacture) of RFID circuit being used. The controller 34 optionally may also send to the host the address (or tag identifier) of the RFID circuit.” column 4, lines 50-67 thru column 5, lines 1-3); a reading unit which reads the second image information stored in the storage device, wherein said controller controls said printer to print an image based on the second image information having the second information read by said reading unit is on a recording sheet in a case where said reading unit reads the second image information (“If the data read by the encoder at step 62 matches the data sent to the encoder, the controller 34 sends a message to the terminal or host computer reporting that the RFID circuit was successfully encoded (step 66), and then returns to step 52. In this manner, the printer 10 encodes information on the RFID circuits of media 16. The media 16 can be printed upon before, after, or during such encoding.” column 5, lines 18-25); and to vary a content to be printed based on the level information written on the storage device by said writing unit (See Petteruti ‘401 at column 4, lines 33-67 thru column 5, lines 1-26. Here, Petteruti ‘401 explains where the RFID tag*

information is encoded for the printer. Petteruti '401 further explains where the information in the storage is varied by the name, description, weight or ID number).

**Regarding claim 2;** Petteruti '401 discloses an image processing apparatus further comprising an authentication unit which authenticates a user for allowing said reading unit to read (*"In response to receiving such commands and data, the printer first determines whether the commands and data are valid (step 54). Validity may include whether the printer 10 is associated with an address or printer-type specified in the command, and whether the command is one of a set of valid commands. If the command and data is not valid, the printer ignores the command and data (step 55) and the controller 34 branches back to step 52. If the commands and data are valid, the controller 34 directs the encoder 22 to query (read) the RFID tag address (or tag identifier) of the RFID circuit on the media adjacent the encoder's antenna (step 56)."* column 4, lines 50-61).

**Regarding claim 7;** Petteruti '401 discloses an image processing method comprising: an input step of inputting image information including a first image information having a first attribute for printing (*"...the portable printer of the present invention has a printer mechanism for printing on media and a RFID encoder for encoding information onto RFID circuits attached, or bonded, to the media to provide integrated RFID media."* column 2, lines 4-8); and a second image information having a second attribute for storing (*"The media is stored in a compartment in the housing on a roll or fan-fold in which multiple RFID circuits are provided along the length of the media."* column 2, lines 16-19); a printing step of printing an image based

on the image information input in said input step on a recording medium to which a storage device is attached (*"It is another aspect of the present invention to provide a portable printer for printing on media and encoding RFID circuits coupled to such media in which the information printed on the media can be related to the information encoded."* column 1, lines 66-67 thru column 2, lines 1-3); a writing step of writing the image information input in said input step with a plurality of level information for visualizing to the storage device attached to the recording medium on which the image based on the image information is printed in said printing step (*"Portable label printer 10 further includes an RFID (read/write) encoder 22 having a RFID antenna 23 capable of encoding by RF signals on the RFID circuit positioned near the antenna. RF shielding 26 is provided in housing 12 to avoid the possibility of encoding other RFID circuits of media 16, but for the RFID circuit of the media 16 at a position near print head 18 adjacent antenna 23. The RFID encoder 22 operates in accordance with programmed microprocessor controller 34 (FIG. 2) on the printed circuit board 24 to write data onto the RFID circuit, such as information as: in a retail environment, product price, type, or other identifier; in a warehouse environment, product information, quantity, or location; and in a baggage ticket, flight information, owner, or baggage identifier."* column 4, lines 21-34); See also (*"In response to receiving such commands and data, the printer first determines whether the commands and data are valid (step 54). Validity may include whether the printer 10 is associated with an address or printer-type specified in the command, and whether the command is one of a set of valid commands. If the command and data is not valid, the printer ignores the command and data (step 55) and the controller 34 branches back to step 52. If the commands and data are valid, the controller 34 directs the encoder 22 to query (read) the RFID tag address*

*(or tag identifier) of the RFID circuit on the media adjacent the encoder's antenna (step 56). The controller 34 then checks if the RFID address read is valid (step 57). If the RFID circuit returns no response or an invalid response, the controller 34 sends a message to the host that an error has occurred (step 58), otherwise, the controller 34 encodes (stores or records) the RFID with the received data (step 60). The controller is programmed to determine which RFID address is valid for the type (or manufacture) of RFID circuit being used. The controller 34 optionally may also send to the host the address (or tag identifier) of the RFID circuit."* column 4, lines 50-67 thru column 5, lines 1-3); a reading step of reading the second image information stored in the storage device (*"If the data read by the encoder at step 62 matches the data sent to the encoder, the controller 34 sends a message to the terminal or host computer reporting that the RFID circuit was successfully encoded (step 66), and then returns to step 52. In this manner, the printer 10 encodes information on the RFID circuits of media 16. The media 16 can be printed upon before, after, or during such encoding."* column 5, lines 18-25); wherein said printing step also prints an image based on the second image information having the second information read in said reading step in a case where said reading step reads the second image information (*"If the data read by the encoder at step 62 matches the data sent to the encoder, the controller 34 sends a message to the terminal or host computer reporting that the RFID circuit was successfully encoded (step 66), and then returns to step 52. In this manner, the printer 10 encodes information on the RFID circuits of media 16. The media 16 can be printed upon before, after, or during such encoding."* column 5, lines 18-25); and to varies a content to be printed based on the level information written on the storage device by said writing unit (See Petteruti '401 at column 4, lines 33-67 thru column 5, lines 1-26. Here, Petteruti '401 explains where the

RFID tag information is encoded for the printer. Petteruti '401 further explains where the information in the storage is varied by the name, description, weight or ID number).

**Regarding claim 9;** Petteruti '401 discloses a computer readable program, stored in a computer-readable storage medium, said program comprising: an input step of inputting image information including a first image information having a first attribute for printing (*"...the portable printer of the present invention has a printer mechanism for printing on media and a RFID encoder for encoding information onto RFID circuits attached, or bonded, to the media to provide integrated RFID media."* column 2, lines 4-8); and a second image information having a second attribute for storing (*"The media is stored in a compartment in the housing on a roll or fan-fold in which multiple RFID circuits are provided along the length of the media."* column 2, lines 16-19); a printing step of printing an image based on the image information input in said input step on a recording medium to which a storage device is attached (*"It is another aspect of the present invention to provide a portable printer for printing on media and encoding RFID circuits coupled to such media in which the information printed on the media can be related to the information encoded."* column 1, lines 66-67 thru column 2, lines 1-3); a writing step of writing the image information input in said input step with a plurality of level information for visualizing to the storage device attached to the recording medium on which the image based on the image information is printed in said printing step (*"Portable label printer 10 further includes an RFID (read/write) encoder 22 having a RFID antenna 23 capable of encoding by RF signals on the RFID circuit positioned near the antenna. RF shielding 26 is provided in housing 12 to avoid the possibility of encoding other RFID circuits of media 16, but for the RFID circuit of the*

*media 16 at a position near print head 18 adjacent antenna 23. The RFID encoder 22 operates in accordance with programmed microprocessor controller 34 (FIG. 2) on the printed circuit board 24 to write data onto the RFID circuit, such as information as: in a retail environment, product price, type, or other identifier; in a warehouse environment, product information, quantity, or location; and in a baggage ticket, flight information, owner, or baggage identifier."* column 4, lines 21-34); See also ("*In response to receiving such commands and data, the printer first determines whether the commands and data are valid (step 54). Validity may include whether the printer 10 is associated with an address or printer-type specified in the command, and whether the command is one of a set of valid commands. If the command and data is not valid, the printer ignores the command and data (step 55) and the controller 34 branches back to step 52. If the commands and data are valid, the controller 34 directs the encoder 22 to query (read) the RFID tag address (or tag identifier) of the RFID circuit on the media adjacent the encoder's antenna (step 56). The controller 34 then checks if the RFID address read is valid (step 57). If the RFID circuit returns no response or an invalid response, the controller 34 sends a message to the host that an error has occurred (step 58), otherwise, the controller 34 encodes (stores or records) the RFID with the received data (step 60). The controller is programmed to determine which RFID address is valid for the type (or manufacture) of RFID circuit being used. The controller 34 optionally may also send to the host the address (or tag identifier) of the RFID circuit."* column 4, lines 50-67 thru column 5, lines 1-3); a reading step of reading the second image information stored in the storage device, wherein said printing step also prints an image based on the second image information having the second information read in said reading step in a case where said reading step reads the second image information ("*If the data read by the*

*encoder at step 62 matches the data sent to the encoder, the controller 34 sends a message to the terminal or host computer reporting that the RFID circuit was successfully encoded (step 66), and then returns to step 52. In this manner, the printer 10 encodes information on the RFID circuits of media 16. The media 16 can be printed upon before, after, or during such encoding.”* column 5, lines 18-25); and to varies a content to be printed based on the level information written on the storage device by said writing unit (See Petteruti ‘401 at column 4, lines 33-67 thru column 5, lines 1-26. Here, Petteruti ‘401 explains where the RFID tag information is encoded for the printer. Petteruti ‘401 further explains where the information in the storage is varied by the name, description, weight or ID number).

**Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 3, 4, 5, 6 & 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Petteruti ‘401 in combination with Palmer et al. (US 5,530,702 hereinafter, Palmer ‘702).

**Regarding claim 3;** Petteruti ‘401 discloses an image processing apparatus comprising: an input unit which inputs image information including a first image information having a first attribute for printing (“...*the portable printer of the present invention has a printer mechanism for printing on media and a RFID encoder for encoding information onto RFID circuits*”

*attached, or bonded, to the media to provide integrated RFID media.” column 2, lines 4-8); and a second image information having a second attribute for storing (“The media is stored in a compartment in the housing on a roll or fan-fold in which multiple RFID circuits are provided along the length of the media.” column 2, lines 16-19); a printer which prints an image based on the image information input by said input unit on a recording medium to which a storage device is attached (“It is another aspect of the present invention to provide a portable printer for printing on media and encoding RFID circuits coupled to such media in which the information printed on the media can be related to the information encoded.” column 1, lines 66-67 thru column 2, lines 1-3); a writing unit which writes the image information to the storage device attached to the recording medium (“Portable label printer 10 further includes an RFID (read/write) encoder 22 having a RFID antenna 23 capable of encoding by RF signals on the RFID circuit positioned near the antenna. RF shielding 26 is provided in housing 12 to avoid the possibility of encoding other RFID circuits of media 16, but for the RFID circuit of the media 16 at a position near print head 18 adjacent antenna 23. The RFID encoder 22 operates in accordance with programmed microprocessor controller 34 (FIG. 2) on the printed circuit board 24 to write data onto the RFID circuit, such as information as: in a retail environment, product price, type, or other identifier; in a warehouse environment, product information, quantity, or location; and in a baggage ticket, flight information, owner, or baggage identifier.” column 4, lines 21-34); a controller which controls said printer and said writing unit such that the image based on the first image information having the first attribute input by said input unit is printed on the recording medium and the second image information having the second attribute input by said input unit is written to the storage device attached to the recording medium on*



which the image is printed by said printer (*"The host terminal or computer sends to the printer 10, via one of RF radio, infrared, of serial cable, commands and data, such commands can direct the printer controller 34 to print on media using the print mechanism 36, or direct the printer controller 34 to encode or read an RFID circuit 16a on media 16 (step 52). The controller 34 responds to such commands which direct RFID circuit encoding in accordance with FIG. 3, and the data associated with the commands may include RF tag information, such as product name, description, weight, or id number."* column 4, lines 40-50); a reading unit which reads the second image information stored in the storage device, wherein said controller controls said printer such that an image based on the second image information having the second information read by said reading unit is printed on a recording sheet in a case where said reading unit reads the second image information (*"If the data read by the encoder at step 62 matches the data sent to the encoder, the controller 34 sends a message to the terminal or host computer reporting that the RFID circuit was successfully encoded (step 66), and then returns to step 52. In this manner, the printer 10 encodes information on the RFID circuits of media 16. The media 16 can be printed upon before, after, or during such encoding."* column 5, lines 18-25).

Petteruti '401 does not expressly disclose an image processing further comprising a display unit which displays an image based on the image information stored in the storage medium.

Palmer '702 discloses an image processing apparatus according further comprising a display unit which displays an image based on the image information stored in the storage medium (*"Referring to FIG. 1, the data terminal of the present invention as embodied in RFID*

*tags 10 is shown in use as part of a supermarket checkout system. As shown cart 22 holding randomly disposed articles 24 to which RFID tags 10 (each having a data terminal) have been conformably attached is moved into an RF shielded enclosure 16 via a conveyor 18 mounted below the enclosure. An external network controller 12 of the type generally called a Point of Sale Terminal (POST), described below, is located inside the enclosure. A display and printer 14 displays the item and/or price and prints a record for the customer..." column 7, lines 29-40).*

Petteruti '401 and Palmer '702 are combinable because they are from same field of endeavor of information systems ("*Accordingly, it is an object of the present invention to provide a method by which the identifying information from a large group of data terminals.*" Palmer '702 at column 4, lines 8-10).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the information system as taught by Petteruti '401 by adding an image processing apparatus further comprising a display unit which displays an image based on the image information stored in the storage medium as taught by Palmer '702.

The motivation for doing so would have been because it is advantageous to provide an RFID tag which is inexpensive and easy to manufacture. ("*...to provide an RFID tag which is inexpensive and easy to manufacture.*" Palmer '702 at column 4, lines 29-30).

Therefore, it would have been obvious to combine Petteruti '401 with Palmer '702 to obtain the invention as specified in claim 1.

**Regarding claim 4;** Palmer '702 discloses an image processing apparatus according to claim 3, further comprising an instruction unit which instructs said printer to perform printing

based on the content displayed by said display unit (*"Referring to FIG. 1, the data terminal of the present invention as embodied in RFID tags 10 is shown in use as part of a supermarket checkout system. As shown cart 22 holding randomly disposed articles 24 to which RFID tags 10 (each having a data terminal) have been conformably attached is moved into an RF shielded enclosure 16 via a conveyor 18 mounted below the enclosure. An external network controller 12 of the type generally called a Point of Sale Terminal (POST), described below, is located inside the enclosure. A display and printer 14 displays the item and/or price and prints a record for the customer..."* column 7, lines 29-40).

**Regarding claim 5;** Petteruti '401 discloses an image processing method comprising: a generating step of generating image information to be printed (*"...the portable printer of the present invention has a printer mechanism for printing on media and a RFID encoder for encoding information onto RFID circuits attached, or bonded, to the media to provide integrated RFID media."* column 2, lines 4-8).

Petteruti '401 does not expressly disclose a setting step of setting an attribute of the image information generated in said generating step, the attribute indicating whether or not the image information is to be visualized; or a transmitting step of transmitting the image information generated in said generating step and the attribute set in said setting step to a printer loaded with a recording medium to which a storage device is attached.

Palmer '702 discloses a setting step of setting an attribute of the image information generated in said generating step, the attribute indicating whether or not the image information is to be visualized (*"Preferably, a central supermarket computer attached to the network controller*

*is programmed to retrieve product information such as name, brand, size, weight, etc. associated with the article ID code and to output the same to a display located outside the shielded enclosure. The same product information can also be output to a printer outside the enclosure for generation of a checkout invoice.” column 6, lines 40-46); (“Referring to FIG. 1, the data terminal of the present invention as embodied in RFID tags 10 is shown in use as part of a supermarket checkout system. As shown cart 22 holding randomly disposed articles 24 to which RFID tags 10 (each having a data terminal) have been conformably attached is moved into an RF shielded enclosure 16 via a conveyor 18 mounted below the enclosure. An external network controller 12 of the type generally called a Point of Sale Terminal (POST), described below, is located inside the enclosure. A display and printer 14 displays the item and/or price and prints a record for the customer...” column 7, lines 29-40); a transmitting step of transmitting the image information generated in said generating step and the attribute set in said setting step to a printer loaded with a recording medium to which a storage device is attached (“Preferably, a central supermarket computer attached to the network controller is programmed to retrieve product information such as name, brand, size, weight, etc. associated with the article ID code and to output the same to a display located outside the shielded enclosure. The same product information can also be output to a printer outside the enclosure for generation of a checkout invoice.” column 6, lines 40-46).*

Petteruti ‘401 and Palmer ‘702 are combinable because they are from same field of endeavor of information systems (“Accordingly, it is an object of the present invention to provide a method by which the identifying information from a large group of data terminals.” Palmer ‘702 at column 4, lines 8-10).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the information systems as taught by Petteruti '401 by adding a setting step of setting an attribute of the image information generated in said generating step, the attribute indicating whether or not the image information is to be visualized; or a transmitting step of transmitting the image information generated in said generating step and the attribute set in said setting step to a printer loaded with a recording medium to which a storage device is attached as taught by Palmer '702.

The motivation for doing so would have been because it is advantageous to provide an RFID tag which is inexpensive and easy to manufacture. ("*...to provide an RFID tag which is inexpensive and easy to manufacture.*" Palmer '702 at column 4, lines 29-30).

Therefore, it would have been obvious to combine Petteruti '401 with Palmer '702 to obtain the invention as specified in claim 1.

**Regarding claim 6;** Petteruti '401 discloses an image processing method wherein authentication information for reading the image information which is not visualized is also set in said setting step, and the authentication information is also transmitted to the printer in said transmitting step ("*If the data read by the encoder at step 62 matches the data sent to the encoder, the controller 34 sends a message to the terminal or host computer reporting that the RFID circuit was successfully encoded (step 66), and then returns to step 52. In this manner, the printer 10 encodes information on the RFID circuits of media 16. The media 16 can be printed upon before, after, or during such encoding.*" column 5, lines 18-25).

**Regarding claim 8;** Petteruti '401 discloses a computer readable program stored in a computer-readable storage medium, said program comprising: an a generating step of generating image information to be printed (*"...the portable printer of the present invention has a printer mechanism for printing on media and a RFID encoder for encoding information onto RFID circuits attached, or bonded, to the media to provide integrated RFID media."* column 2, lines 4-8).

Petteruti '401 does not expressly disclose a setting step of setting an attribute of the image information generated in said generating step, the attribute indicating whether or not the image information is to be visualized; or a transmitting step of transmitting the image information generated in said generating step and the attribute set in said setting step to a printer loaded with a recording medium to which a storage device is attached.

Palmer '702 discloses a setting step of setting an attribute of the image information generated in said generating step, the attribute indicating whether or not the image information is to be visualized (*"Preferably, a central supermarket computer attached to the network controller is programmed to retrieve product information such as name, brand, size, weight, etc. associated with the article ID code and to output the same to a display located outside the shielded enclosure. The same product information can also be output to a printer outside the enclosure for generation of a checkout invoice."* column 6, lines 40-46); and a transmitting step of transmitting the image information generated in said generating step and the attribute set in said setting step to a printer loaded with a recording medium to which a storage device is attached (*"Preferably, a central supermarket computer attached to the network controller is programmed to retrieve product information such as name, brand, size, weight, etc. associated with the article*

*ID code and to output the same to a display located outside the shielded enclosure. The same product information can also be output to a printer outside the enclosure for generation of a checkout invoice.” column 6, lines 40-46).*

Petteruti ‘401 and Palmer ‘702 are combinable because they are from same field of endeavor of information systems (*“Accordingly, it is an object of the present invention to provide a method by which the identifying information from a large group of data terminals.”* Palmer ‘702 at column 4, lines 8-10).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the information systems as taught by Petteruti ‘401 by adding a setting step of setting an attribute of the image information generated in said generating step, the attribute indicating whether or not the image information is to be visualized; or a transmitting step of transmitting the image information generated in said generating step and the attribute set in said setting step to a printer loaded with a recording medium to which a storage device is attached as taught by Palmer ‘702.

The motivation for doing so would have been because it is advantageous to provide an RFID tag which is inexpensive and easy to manufacture. (*“...to provide an RFID tag which is inexpensive and easy to manufacture.”* Palmer ‘702 at column 4, lines 29-30).

Therefore, it would have been obvious to combine Petteruti ‘401 with Palmer ‘702 to obtain the invention as specified in claim 1.

**Conclusion**

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS T. RILEY whose telephone number is (571)270-1581. The examiner can normally be reached on Monday - Friday, 7:30-5:00, est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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